

BIRD-IN-THE-HAND

ON THE POTENTIAL SEXING OF BLACK SHOULDERED KITES

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The sexing of live Black-shouldered Kites Elanus caeruleus is very problematic, mainly as there is no sexual dimorphism in plumage. It is generally accepted that the larger birds are females and the smaller birds are males, as is usually the case with birds of prey.

In an attempt to shed more light on this problem it was agreed that the 10th October, 1974, be spent on the Springbok Flats, Tvl., capturing Black-shouldered Kites using a Balchatri-trap, with the intention of applying the "pubic bone sexing method". During this excursion 28 Black-shouldered Kites were captured and examined.

Apart from taking standard measurements, the pubic bones were examined using the middle finger to estimate the gap between the two bones, as it is this distance that we use as a sexing criterion.

In adult male birds the pubic bones are very close to each other, whereas in adult females (which have laid eggs) the pubic bones have moved apart.

We assume from this information that juvenile birds, whether male or female will have a small pubic bone gap. 3 Adult birds were captured, the remaining 25 birds were in juvenile or subadult plumage.

The following observations were made and measurements were taken.

Juvenile Birds

The majority had a pubic bone gap varying between 2 and 4mm, the extremes being 1mm and 6mm.

Adult Birds

As tabulated below (dimensions in mm)

Bird	Estimated p.b. Gap	Weight	Wing	Tail	Culmen	Hind Claw
1	15	300 g	285	120	17.1	17.3
2	3	225 g	260	100	16.8	16.3
3	4	255 g	265	115	16.0	17.0

It should be stated here that M.B.S. and P.J.W. have very little experience with raptors, however, considerable experience in sexing rails and crakes by the pubic bone method. It is with this experience in mind and with the raptor knowledge of F.v.M. that we are convinced that bird 1 is a female and birds 2 and 3 males.

It should be remembered that even by applying the pubic bone sexing method it will be impossible to sex all birds in adult plumage. There will be doubt when a bird in adult plumage is captured prior to the known breeding season and it therefore cannot be established whether this bird has laid eggs or not.

This doubt will be removed in the event of a recapture of this bird in following years.

As the volume of data increases, measurements will prove statistical significance of sexual dimorphism relating to certain measurements. The other problem is of an application nature where "feel" is required to estimate the pubic bone gap.

It is appreciated that some people lack this "feel" and it is for this reason desirable that a more direct method of measuring be found.

Post Script: Since the above article was written, further tests have been done on about 30 birds, several of which were adults. A special gauge made of fibreglass has been made with protrusions to simulate the feel of the bones concerned, the spacing being 3, 5, 7, 10, 12 and 16mm. After palpating the bird, comparison with the gauge using the same finger or fingers, gives a very high standard of accuracy. Virtually no practice is required so that the results achieved by a novice tend to be of a high order. Anyone interested in trying this method on Elanus caeruleus may obtain the gauges free of charge from Mr. Frank von Maltitz, 51 Eighth Street, Linden, Johannesburg, Transvaal.
